UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,242	01/19/2005	Eleanor Bernice Ridley	HP/15-22715/A/MA 2224/PCT	6482

324 7590 10/30/2006

CIBA SPECIALTY CHEMICALS CORPORATION
PATENT DEPARTMENT
540 WHITE PLAINS RD
P O BOX 2005
TARRYTOWN, NY 10591-9005

EXAMINER	
ROGERS, JAMES WILLIAM	

ART UNIT	PAPER NUMBER
1618	

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/523,242	RIDLEY ET AL.	
	Examiner	Art Unit	
	James W. Rogers, Ph.D.	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/23/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,7,9 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically claims 1,7 and 9 each claim a copolymer derived from the polymerization of a, b and c, the meets and bounds of this claim is not clear, for instance what type of copolymer is encompassed by the polymerization, such as a random, block, graft or alternating copolymer. Also as claimed it is not clear if further steps could be encompassed within the currently claimed limitation, for instance the claims do not rule out further functionalization or polymerization after the copolymer has formed. For clarity the examiner suggest rewriting the claims to limit the copolymer to the exact type disclosed in the specification, for example a graft copolymer polymerized from a, b and/or c. To expediate the examining process the examiner simply searched for any copolymer comprised of monomers a and b. Regarding claim 14, R_8 and R_9 are equivalent to one another therefore applicant cannot claim a limitation not encompassed by both, in the claim R_8 signifies hydrogen or methyl while R_9 signifies only methyl, since the groups are equivalent R_9 must also signify a hydrogen. To expedite the examining process the examiner simply searched for either a hydrogen or methyl group at R_8 and R_9.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Galleguillos et al. (US 6,361,768 B1, cited in search report PCT/EP03/07637 provided by applicants).

Galleguillos teaches a hydrophilic ampholytic polymer and the method to produce it; the polymer is useful in personal care formulations. See abstract. The polymer is comprised of 10-45 mole percent of at least one cationic monomer (the same monomer as applicants monomer of formula I), 35-95 mole percent of at least one non-ionic hydrophilic monomer (the same monomer as applicants monomer of formula II) and 0-1.5 mol percent of a cross-linking agent (including methylenebisacrylamide), the polymer is modified by HCl, HBr or HI which would meet the limitations that the counter ion of formula I is Cl^-,Br^- or I^-, since it is inherent that that the inorganic acid will disassociate in aqueous media and the anions will associate with the cationic quaternary amine. See col 4 lin 36-49, col 5 lin 50-col 6 lin 50,col 7 lin 34-47, col 11 lin 31-55 and col 18 lin 13-26. Regarding the limitations in claim 11 which limits the components of the personal care composition, Galleguillos teaches many additives such as surfactants, the patent teaches that the amount of copolymer used in the personal care composition is between 0.01-20% and in the experimental Galleguillos

used 8% propylene glycol (meets limitation of an oil-component) in a hair conditioning formulation.

Claims 1-3,5-7,10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Strasilla et al. (US 4,460,567, cited in applicants IDS).

Strasilla teaches quaternary copolymeric ammonium salts based on acrylic compounds, the method to produce them and their use in cosmetics. See abstract. The copolymer is comprised of 5 to 80% of a cationic quaternary amine of formula I (same as applicants formula I), 10-95% of an acrylamide of formula II (same as applicants formula II), the counter ion of the cationic quaternary amine of formula I can be a halide anion or an alkyl sulfate anion having 1-4 carbon atoms (satisfies methosulfate). See col 1 lin 15-col 2 lin 30 and col 8 lin 6-34.

Claims 1-2,5-7 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Mita et al. (US 5,278,269, cited in search report PCT/EP03/07637 provided by applicants).

Mita teaches a film-forming resin and hair dressing composition. See abstract. The film forming resin is a copolymer comprised of a 30-80% methacrylamide monomer of formula I (same as applicants formula II), 2-30% methacrylate and/or methacrylamide monomer of formula III (same as applicants formula I, when protonated), Mita teaches that the tertiary amino group may be modified with an inorganic acid such as HCl which would meet the limitations that the counter ion of formula I is Cl^-, since it is inherent that that the inorganic acid will disassociate in aqueous media and the anions will associate with the cationic quaternary amine. See col 2 lin 3-57, col 4 lin 67-col 5 lin 4. Regarding

the limitations in claim 11 which limits the components of the personal care composition, Mita teaches that the hair dressing composition can contain 2-6% of the film forming resin, 0.1-20% oil(s) and 0.5-3.0% texture enhancer (satisfies additive). See col 5 lin 21-37.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strasilla et al. (US 4,460,567, cited in applicants IDS) in view of Galleguillos et al. (US 6,361,768 B1, cited in search report PCT/EP03/07637 provided by applicants) and in view of Lentini et al. (US 5,665,368).

Strasilla is disclosed above. Strasilla does not disclose the use of a crosslinking agent and while Strasilla discloses the use of oils in the cosmetic compositions the patent is silent on the amount of oil that can be used.

Galleguillos is used primarily for the disclosure within that copolymers such as those disclosed in Strasilla were already well known at the time of the invention to be crosslinked and used in cosmetic compositions. Also Galleguillos disclosed the use of 8% propylene glycol (meets limitation of an oil-component) in a hair conditioning formulation, within applicants claimed range in claim 11. See abstract and col 2 lin 58-61.

Lentini is used only for the disclosure that oils were already well known at the time of the invention to be used in a large variety of concentrations in cosmetics depending upon the application, for instance the cosmetics disclosed within Lentini had an oil content of from about 20-80 percent within applicants claimed range for claims 11-12.

It would have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to combine the art described in the documents above because Strasilla disclosed all of applicants claimed invention except for the use of a crosslinking agent and the amount of oil in the cosmetics, while Galleguillos disclosed the use of crosslinkers when polymerizing the copolymers comprised of the same monomers as in the Strasilla patent and Lentini is used only to show that it was well known at the time of the invention that oils in cosmetic compositions could be used in a large variety of concentrations. The motivation to combine the above documents would

be a cosmetic composition comprised of oil and a crosslinked copolymer polymerized from a quaternary ammonium monomer and an acrylamide monomer. The advantage of such a cosmetic would be that by crosslinking the copolymer the skilled artisan could modify and control the properties of the resulting copolymer, also the skilled artisan could further modify and control the properties of the cosmetic composition by adjusting the amount of oil in the cosmetic. Thus, the claimed invention, taken as a whole was *prima facie* obvious over the combined teachings of the prior art.

Conclusion

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER